This Page Is Inserted by IFW Operations and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

As rescanning documents will not correct images, please do not report the images to the Image Problem Mailbox.

and 27 now more clearly recite that either the counter-support is fixed in place on a workpiece support table and the marking tool is fixed in place on a punch holder (claim 26) or the counter-support is fixed in place on a punch holder and the marking tool is fixed in place on a workpiece support table (claim 27). Thus, Applicant submits that the amendment to claim 26 and new claim 27 make the objection to claim 26 and the rejection to claim 26 under 35 U.S.C. § 112, first paragraph, now moot.

Claims 12, 20, 21, 25 and 26 were rejected under 35 U.S.C. § 102(b) as being anticipated by Hirate. The Examiner alleges that Hirate teaches an apparatus for marking a sheet-shaped workpiece alleging that Hirate teaches a marking tool 23 and at least one counter-support 25 located opposite the marking tool. Further, the Examiner alleges that Hirate teaches an apparatus which is configurable with a workpiece having a marking tool with a tool tip which can be pressed into or onto a marking surface of a workpiece against a restored force of an elastic element.

Contrary to the Examiner's allegation, Hirate fails to anticipate the claimed apparatus as Hirate fails to teach or suggest either the claimed marking tool or the claimed counter-support.

The claimed <u>marking tool</u> is fixed in a punch holder or a holder of the workpiece support table of a <u>punch press</u>. Further, the counter-support is fixed in place relative to the workpiece and is disposed on a side of the workpiece opposite a surface to be marked.

Referring to the specification to provide a better understanding of the claimed invention but to in no way limit the scope of the claimed invention, the counter-support supports a workpiece during operation of the present invention. See paragraph [0046]. Thus, the counter-support counters the effects of the marking tool by opposing the force

of the marking tool which is pressed into the workpiece. In one specific embodiment, advantageously, the counter-support is aligned with the marking tool.

Hirate fails to teach a <u>marking tool</u> which can be fit into a <u>punch holder</u> of a punch press or a <u>holder</u> of a workpiece support table of a punch press. On the contrary, the device of Hirate clearly teaches its marking tool as stylus 77 with marking tip 79. Moreover, stylus 77 is part of a completely separate marking tool assembly 83 from the punch press itself. Furthermore, Hirate clearly teaches two separate devices, a marking apparatus 29 and a punch press 83 (see Hirate, Figures 1 and 3 and column 6, lines 19-21). Accordingly, marking tool 79 is inserted into stylus 77 of the marking apparatus 83. Hirate fails to teach or suggest that the marking tool 79 is inserted into punch press 83, let alone, inserted into a punch holder such as disk 3.

Moreover, contrary to the Examiner's allegation, punch-and-die pairs 23,25 fail to teach or suggest the claimed marking tool and counter-support respectively as claimed. A marking tool, a counter-support, a punch, and a die, have very specific meanings understood by one of ordinary skill in the art. One of ordinary skill in the art would not refer to a punch-and-die pair as a marking tool and counter-support. To do so would be repugnant to the common everyday meaning of these terms recognized by one of ordinary skill in the art.

Furthermore, a counter-support is a specific term of art. In the context of the claimed invention, it would be readily understood and apparent to one of ordinary skill in the art that the claimed counter-support would support a workpiece against the force-of-the marking tool during a marking operation. Hirate's die 25 fails to teach or suggest a counter-support as that term would be understood by one of ordinary skill in the art.

Furthermore, Hirate fails to teach or suggest the claimed marking tool elastic member which provides a restoring force for the tool tip as claimed.

With regard to dependent claims 20, 21, 25, 26 and 27, Hirate fails to teach or suggest the further limitations provided in these dependent claims. For example, with regard to claim 21, Hirate fails to teach or suggest an adjustable support associated with the marking tool by means of which the position of the tool tip and/or pre-stress of its restoring spring can be adjusted.

With regard to claim 21, Hirate fails to teach or suggest a marking tool comprising a tip capable of penetrating the surface of <u>a predetermined depth to inscribe</u> <u>a mark</u>. On the contrary, the device of Hirate is clearly directed to punching a hole through a workpiece <u>not</u> inscribing a mark of a predetermined depth. Any modification of Hirate to mark a workpiece rather than punch a hole in the workpiece would be contrary to the clear teaching of Hirate which is to punch a hole through a workpiece.

With regard to claim 25, Hirate fails to teach or suggest aligning a counter-support with the marking tool, since, as claimed as discussed above, Hirate fails to teach or suggest a counter-support, let alone, aligning a counter-support with a marking tool.

With regard to claim 26, Hirate fails to teach or suggest a counter-support fixed to a workpiece support table and a marking tool fixed to a punch holder of a punch press.

With regard to claim 27, Hirate fails to teach or suggest a counter-support fixed to a punch holder of a punch press and a marking tool fixed to the workpiece support-table-of a punch press.

Based on the foregoing discussion, Applicant respectfully requests that the rejection to claims 12, 20, 21, 25 and 26 under 35 U.S.C. § 102(b) as being anticipated by Hirate be withdrawn.

Claims 12, 13, 20 and 25 were rejected under 35 U.S.C. § 102(b) as being anticipated by Andou. Contrary to the Examiner's allegation, Andou fails to teach or suggest the marking tool or counter-support as claimed. Specifically, the printing wires 15 (Examiner identified as marking tool) fails to teach or suggest the claimed marking tool which is fixed in place in a punch holder of a punch press or a holder of a workpiece support table of a punch press. Novelty of the invention lies in part in a marking tool which is inserted into a punch holder of a punch press or a workpiece holder of a punch press.

Contrary to the Examiner's assertion, print head 38 of a dot matrix impact paper printer of Andou fails to read on or anticipate a punch holder of <u>a punch press</u> to which the claimed marking tool is disposed. A punch holder and a punch press are specific apparatus which one of ordinary skill in the art would readily appreciate and understand. Moreover, one skilled in the art would understand a <u>punch holder</u> of a <u>punch press</u> to be a holder designed to fit various tools and parts including various punches.

Andou's impact paper print head 38 fails to be a punch holder let alone part of a punch press. Moreover, one skilled in the art would never refer to an impact paper printer as a punch press as to do so would be repugnant to the ordinary meaning of these terms. Since print head 38 is not a punch holder nor are printing wires 15 disposable in a punch press as claimed, Andou fails to anticipate the claimed marking tool.

Based on the foregoing discussion, Applicant respectfully requests that the rejection to claims 12, 13, 20 and 25 under 35 U.S.C. § 102(b) as being anticipated by Andou be withdrawn.

Claims 12, 20, 22, 23 and 25 were rejected under 35 U.S.C. § 102(b) as being anticipated by Rohr. Contrary to the Examiner's allegation, tip 78 of the marker agent 26 fails to teach or suggest the claimed marking tool as marking tip 78 is not disposable in a punch holder of a punch press or a holder of the workpiece support table of a punch press. Contrary to the Examiner's allegation, container 77 is not a punch holder or holder of a punch press. On the contrary, container 77 is used in a sewing machine for marking a piece of fabric. A sewing machine is not equivalent to the claimed punch press. Further, Rohr fails to teach or suggest a counter-support as claimed. In view of the foregoing, Applicant respectfully requests that the rejection to claims 12, 20, 22, 23 and 25 under 35 U.S.C. § 102(b) as being anticipated by Rohr be withdrawn.

Claims 18 and 19 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Hirate in view of Canning. As discussed above with regard to the present invention, Hirate fails to teach or suggest the subject matter of claim 12 from which claims 18 and 19 depend. Moreover, the subject matter of Canning, namely semiconductor manufacturing, is not analogous to that of Hirate and therefore, it is improper to combine the subject matter of the semiconductor cutting apparatus of Canning with a mechanical punch press of Hirate in an obviousness-type-rejection.

Moreover, one of ordinary skill in the art of a mechanical punch press would not turn to the art of a semiconductor cutting apparatus, and vice versa, in order to solve problems in their respective art. Thus, one of ordinary skill in the art wishing to provide

a mechanical punch press with a marking tool would not combine the separate and dissimilar art of a mechanical punch press such as Hirate with that of a semiconductor cutting device of Canning. In view of the foregoing, Applicant respectfully requests that the rejection to claims 18 and 19 under 35 U.S.C. § 103(a) as being unpatentable over Hirate in view of Canning be withdrawn.

Moreover, contrary to the Examiner's allegation, it would not have been obvious for one of ordinary skill in the art to substitute the tool-and-die set of the punch press of Hirate with a diamond tip blade of Canning as doing so would be completely contrary to the clear teaching of Hirate which is directed to a punch press for punching holes in a workpiece. Therefore, it would be illogical to suggest using a diamond tool cutting tip in a punch press as alleged by the Examiner as doing so would be completely contrary to the clear teaching of Hirate whereby a diamond blade tip of Canning would fail to be effective in punching holes in a workpiece as taught by Hirate.

In view of the foregoing, Applicant respectfully requests that the rejection to claims 18 and 19 under 35 U.S.C. § 103(a) be withdrawn.

Claim 18 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Andou in view of Sawa. Claim 18 is not obvious from Andou in view of Sawa as Andou and Sawa are non-analogous references with respect to each other and therefore it is improper to combine them in an obviousness-type rejection. Andou is directed to an impact paper printer whereas Sawa is directed to a head wire and manufacturing process. One of ordinary skill in the art wishing to solve the problems in the art-relating-to an impact paper printer would not look to the art of a head wire and manufacturing process of Sawa.

Moreover, even if one were, *arguendo*, to combine the separate and dissimilar references, the present invention would not be taught nor suggested. As discussed above with regard to claim 12 from which claim 18 depends, Andou fails to teach or suggest the claimed subject matter. Further, Sawa fails to make up the deficiencies of Andou with regard to claim 18 and therefore the combined teaching of Andou in view of Sawa fails to teach or suggest the subject matter of claim 18 which includes further limitations not taught nor suggested by Andou in view of Sawa. Therefore, Applicant respectfully requests that the Examiner withdraw the rejection to claim 18 under 35 U.S.C. § 103(a) as being obvious from Andou in view of Sawa.

Claims 22 and 23 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Hirate in view of Rohr. Claims 22 and 23 are not made obvious from Hirate in view of Rohr as Hirate and Rohr are non-analogous art with regard to one another. Hirate is directed to a mechanical punch press for punching holes in a steel workpiece whereas Rohr is directed to a device for marking a fabric workpiece. Therefore, one of ordinary skill in the art of steel workpiece mechanical punch presses would not look to the art of a fabric marking device to solve problems in the mechanical press art and vise versa. Therefore, contrary to the Examiner's allegation, it would not have been obvious for one of ordinary skill in the art to combine such dissimilar references. Accordingly, Applicant respectfully requests that the rejection to claims 22 and 23 under 35 U.S.C. § 103(a) as being unpatentable over Hirate in view of Rohr be withdrawn.

Claim 24 was rejected under 35 U.S.C. § 103(a) as being unpatentable-over—
Hirate in view of Keller. Contrary to the Examiner's assertion claim 24 is not obvious from Hirate in view of Keller as Hirate and Keller are two non-analogous pieces of art with regard to one another. Hirate is directed to a mechanical punch press for punching

holes in a steel workpiece whereas Keller is directed to an <u>impact paper printer</u>. Clearly one of ordinary skill in the art of a <u>mechanical punch press</u> would not look to the art of an <u>impact paper printer</u> of Keller. Moreover, as discussed with regard to claim 12 from which claim 24 depends, Hirate fails to teach or suggest all claimed elements. Keller fails to make up the deficiencies of Hirate and furthermore the combined, *arguendo*, teachings of Hirate and Keller fail to teach or suggest the further claim limitations of claim 24. In view of the foregoing, Applicant respectfully requests that the rejection to claim 24 as being obvious from Hirate in view of Keller be withdrawn.

Applicant gratefully appreciates the Examiner's indication of allowable subject matter of claims 14-17. By this Amendment, Applicant respectfully submits that all pending claims now are in condition for allowance. Should the Examiner deem the application to be in anything but a condition for allowance, the Examiner is invited to call the undersigned at the number below.

Respectfully submitted,

LARSON & TAYLOR, PLC

Marvin Petry

Registration No. 22752

1199 North Fairfax Street, Suite 900 Alexandria, Virginia 22314 (703) 739-4900

June 20, 2003

ATTACHMENT A Amendments to the Claims

Following herewith is a complete listing of the claims, including a marked copy of the currently amended claims.

1-11. (Withdrawn)

workpiece, comprising at least one marking tool and at least one counter-support located opposite the marking tool, the apparatus being configurable with the workpiece disposed between the marking tool and the counter support, wherein the marking tool has a tool tip, which can be pressed onto or into a marking surface of the workpiece against a restoring force of an a marking tool elastic element, the marking tool being fixed in place on a punch holder of a punch press or a holder of a workpiece support table of a punch press, and wherein the counter-support can be fixed in place relative to the workpiece and disposed on a side of the workpiece opposite the marking surface.



- 13. (Original) The apparatus according to claim 12, wherein the counter-support includes at least one rotatable support roller or support ball for the movable support of the workpiece.
- 14. (Original) The apparatus according to claim 12 wherein the marking tool includes rotatable support rollers or support balls, seated in an elastically spring-loaded manner.

- 15. (Original) The apparatus according to claim 14, wherein spring travel of the support rollers or support balls is greater than spring travel of the tool tip.
- 16. (Original) The apparatus according to claim 15, wherein, in a rest position, the tool tip projects upwardly less than the support rollers or support balls, but wherein the support rollers or support balls are resiliently retractable to a lower position than the tool tip.



- 17. (Original) The apparatus according to claim 14, wherein resiliency of the elastic elements of the support rollers is less than resiliency of the elastic element of the tool tip.
- 18. (Original) The apparatus according to claim 12, wherein the tool tip is selected from the group consisting of diamond, boron nitride or a hard alloy.
- 19. (Original) The apparatus according to claim 12 wherein the tool tip is cone-shaped.
- 20. (Original) The apparatus according to claim 12, including an adjustable support associated with the marking tool, by means of which the position of the tool tip and/or the prestress of its restoring spring can be adjusted.

- 21. (Original) The apparatus according to claim 12, wherein the marking tool comprises a tip capable of penetrating the surface of the workpiece to a predetermined depth to inscribe a mark.
- 22. (Original) The apparatus according to claim 12, wherein the marking tool comprises an ink point for writing a marking on the surface of the workpiece.



- 23. (Original) The apparatus according to claim 22, wherein the ink point comprises a ball point, a roller ball point, a felt tip or a grease pencil.
- 24. (Original) The apparatus according to claim 12, wherein the marking tool comprises brass or plastic.
- 25. (Previously Added) The apparatus according to claim 12, wherein the counter-support is aligned with the marking tool.
- 26. (Currently Amended) The apparatus according to claim 12, wherein the counter-support can be is fixed in place on the punch holder or the a workpiece support table of a punch press and the marking tool is fixed in place on a punch holder of the punch press.
- 27. (New) The apparatus according to claim 12, wherein the counter-support is fixed in place on a punch holder of a punch press and the marking tool is fixed in place on a workpiece support table of the punch press.